

Amendments to the Claims:

Please cancel claims 3, 10 and 17, and amend claims 1, 2, 4, 7-9, 13, 15 and 16 as shown in the following listing of claims. This listing of claims will
5 replace all prior versions, and listings, of claims in the application.

- 1 1. (currently amended) An impedance transformation network comprising:
 - 2 an input node to receive an output signal;
 - 3 an output node to transmit the output signal;
 - 4 a fixed impedance transformation circuit connected between the
 - 5 input node and the output node, the fixed impedance transformation circuit being
 - 6 configured to provide a fixed impedance transformation to partially transform a
 - 7 first impedance at the output node to a second impedance at the input node; and
 - 8 a varactor device connected in series on a signal path from-between
 - 9 the input node to and the output node, the varactor device being configured to
 - 10 provide a variable impedance transformation in response to a power level of the
 - 11 output signal to partially transform the first impedance at the output node to the
 - 12 second impedance at the input node.
- 1 2. (currently amended) The impedance transformation network of claim 1
2 wherein the varactor device includes a ferroelectric varactor connected in series
3 on the signal path-between the fixed impedance transformation circuit and the
4 output node.
- 1 3. (canceled).
- 1 4. (currently amended) The impedance transformation network of claim 1
2 wherein the fixed impedance transformation circuit includes at least one
3 transmission line on the a signal path-between the input node and the output node
4 and at least one shunt capacitor connected to the signal path.
- 1 5. (original) The impedance transformation network of claim 4 wherein the
2 shunt capacitor is a chip capacitor.

1 6. (original) The impedance transformation network of claim 4 wherein the
2 fixed impedance transformation circuit includes at least one additional
3 transmission line on a second signal path between a supply voltage terminal and
4 the signal path and at least one additional shunt capacitor connected to the second
5 signal path, the second signal path at least partially being used to supply DC bias
6 voltage to the varactor device.

1 7. (currently amended) The impedance transformation network of claim 6-7
2 wherein the additional shunt capacitor is a surface mount technology capacitor.

1 8. (currently amended) A method of transmitting an output signal to an
2 output node, the method comprising:
3 receiving the output signal at an input node; and
4 providing a variable impedance transformation between the input
5 node and the output node using a varactor device connected in series on a signal
6 path frombetween the input node toand the output node, the variable impedance
7 transformation being provided in response to a power level of the output signal to
8 transform a first impedance at the output node to a second impedance at the input
9 node.

1 9. (currently amended) The method of claim 8 wherein the varactor device
2 includes a ferroelectric varactor connected in series on the signal pathbetween the
3 input nodeand the output node.

1 10. (canceled).

1 11. (original) The method of claim 8 wherein the receiving of the output signal
2 included receiving a radio frequency output signal at the input node.

1 12. (original) The method of claim 8 further comprising providing a fixed
2 impedance transformation between the input node and the output node.

1 13. (currently amended) The method of claim 12 wherein the fixed impedance
2 transformation is provided by at least one transmission line on the a signal path
3 ~~between the input node and the output node~~ and at least one shunt capacitor
4 connected to the signal path.

1 14. (original) The method of claim 13 wherein the fixed impedance
2 transformation is further provided by at least one additional transmission line on a
3 second signal path between a supply voltage terminal and the signal path, the
4 second signal path at least partially being used to supply DC bias voltage to the
5 varactor device.

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1 15. (currently amended) A power amplifier comprising:

2 an amplifier configured to provide an output signal; and

3 an impedance transformation network including an input node and
4 an output node, the input node being connected to the amplifier, the output node to
5 be connected to a load, the impedance transformation network further including a
6 varactor device connected in series on a signal path from~~between~~ the input node
7 to~~and~~ the output node, the varactor device being configured to provide a variable
8 impedance transformation in response to a power level of the output signal to
9 transform a load impedance at the output node to a desired impedance in a
10 forward direction at the input node, the forward direction being from the input
11 node to the output node.

1 16. (currently amended) The power amplifier of claim 15 wherein the varactor
2 device includes a ferroelectric varactor connected in series on the signal path
3 ~~between the input node and the output node.~~

1 17. (canceled).

1 18. (original) The power amplifier of claim 15 wherein the amplifier is
2 configured to provide a radio frequency output signal.

1 19. (original) The power amplifier of claim 15 wherein the impedance
2 transformation network comprises a fixed impedance transformation circuit
3 connected to the input node and the varactor device, the fixed impedance
4 transformation circuit including at least one transmission line on the signal path
5 and at least one shunt capacitor connected to the signal path.

1 20. (original) The power amplifier of claim 19 wherein the fixed impedance
2 transformation circuit includes at least one additional transmission line on a
3 second signal path between a supply voltage terminal and the signal path and at
4 least one additional shunt capacitor connected to the second signal path, the
5 second signal path at least partially being used to supply DC bias voltage to the
6 varactor device.